

**NOVO NORDISK PHARMACEUTICALS, INC.****FACSIMILE TRANSMITTAL SHEET**

TO:	Examiner, S. Patel	FROM:	Rashida Haji
COMPANY:	USPTO	DATE:	JANUARY 10, 2005
FAX NUMBER:	571-273-0671	TOTAL NO. OF PAGES INCLUDING COVER:	11
PHONE NUMBER:		SENDER'S PHONE NUMBER:	609-919-7824
RE:	USSN: 09/483,504 Attorney Docket No.: 5686.200-US	SENDER'S FAX NUMBER:	609-919-7741

☐ URGENT    ☐ FOR REVIEW    ☐ PLEASE COMMENT    ☐ PLEASE REPLY    ☐ PLEASE RECYCLE

NOTES/COMMENTS:

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Attorney Docket No.: 5686.200-US

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Teng et al.

Application No.: 09/483,504

Group Art Unit: To be assigned

Filed: January 14, 2000

Examiner: To be assigned

For: Non-Peptide GLP-1 Agonists

**INFORMATION DISCLOSURE STATEMENT**Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

In accordance with 37 C.F.R. 1.56, 1.97 and 1.98, Applicants submit herewith references which they believe may be material to the patentability of this application and with respect to which there may be a duty to disclose in accordance with 37 C.F.R. 1.56.

While the references may be "material" under 37 C.F.R. 1.56, it is not intended to constitute an admission that the references are "prior art" unless specifically designated as such.

The filing of this Information Disclosure Statement shall not be construed as a representation that no other material references than those listed exist or that a search has been conducted.

The references are listed in Form PTO-1449 which is in accordance with the requirements of M.P.E.P. 609. A copy of the references is also enclosed.

The references are as follows:

1. J.J. Holst, Annu. Rev. Physiol., Vol. 59, pgs. 257-271 (1997)
2. Nauck et al., J. Clin. Invest., Vol. 91, pgs. 301-307 (1993);
3. Qualmann et al., Acta Diabetol., Vol. 32, pgs. 13-16 (1995);
4. Nathan, M.D. et al., Diabetes Care, Vol. 15, pgs. 270-276 (1992);
5. Nauck et al., Diabetologia, Vol. 36, pgs. 741-744 (1993);

6. Kreymann et al., *The Lancet*, pgs. 1300-1304, December 5, 1987;
7. Rachman et al., *Diabetologia*, Vol. 40, pgs. 205-211 (1997);
8. Gutniak, M.D., Ph.D. et al., *Diabetes Care*, Vol. 17, pgs. 1039-1044 (1994);
9. Nauck et al., *Diabetologia*, Vol. 39, pgs. 1546-1553 (1996);
10. Creutzfeldt, M.D., F.R.C.P. et al., *Diabetes Care*, Vol. 19, pgs. 580-586 (1996);
11. Fehmann et al., *Endocrinology*, Vol. 130, pgs. 159-166 (1992);
12. Wang et al., *Endocrinology*, Vol. 136, pgs. 4910-4917 (1995);
13. Wang et al., *The Journal of Clinical Investigation*, Vol. 99, pgs. 2883-2889 (1997);
14. Edvell et al., *Endocrinology*, Vol. 140, pgs. 778-783 (1999);
15. Buteau et al., *Diabetologia*, Vol. 42, pgs. 856-864 (1999);
16. Xu et al., *Diabetes*, Vol. 48, pgs. 2270-2276 (1999);
17. Nauck et al., *Diabetologia*, Vol. 29, pgs. 46-52 (1986);
18. Holst et al., *Diabetologia*, Vol. 40, pgs. 984-986 (1997);
19. Nauck et al., *Diabetologia*, Vol. 36, pgs. 741-744 (1993);
20. Nauck et al., *J. Clin. Invest.*, Vol. 91, pgs. 301-307 (1993);
21. Flint et al., *J. Clin. Invest.*, Vol. 101, pgs. 515-520 (1998);
22. Naslund et al., *Am J Clin Nutr*, Vol. 68, pgs. 525-530 (1998);
23. Naslund et al., *Drug News Perspect*, Vol. 11, pgs. 92-97 (1998);
24. Ranganath et al., *Gut*, Vol. 38, pgs. 916-919 (1996);
25. Naslund et al., *Digestive Diseases and Sciences*, Vol. 43, pgs. 945-952 (1998);
26. Deacon et al., *Diabetes*, Vol. 44, pgs. 1126-1131 (1995);
27. Knudsen et al., *European Journal of Pharmacology*, Vol. 318, pgs. 429-435 (1996);
28. Horn et al., *Receptors and Channels*, Vol. 5, pgs. 305-314 (1998);
29. Adelhorst et al., *The Journal of Biological Chemistry*, Vol. 269, No. 9, pgs. 6275-6278 (1994);
30. Mechanism et al., *The Journal of Biological Chemistry*, Vol. 273, No. 29, pgs. 17979-17982 (1998);
31. Willms et al., *Journal of Clinical Endocrinology and Metabolism*, Vol. 81, No. 1, pgs. 327-332 (1996);
32. WO 97/32858;
33. FR 1 469 360;
34. EP 0 277 794 A2;
35. WO 98/52945;
36. WO 99/01442;
37. WO 96/30370;
38. WO 95/05378;
39. DE 3 826 603 A1;
40. EP 0 018 493 A1;
41. EP 0 216 299 A1;
42. EP 0 338 346 A2;
43. WO 95/24403;
44. WO 99/01423;
45. WO 91/11457;

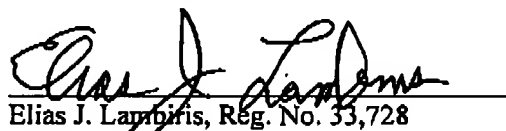
46. WO 90/11296;
47. WO 87/06941;
48. WO 98/28414;
49. WO 98/20895;
50. Great Britain Patent Application 966,818;
51. U.S. Patent 4,200,748;
52. U.S. Patent 5,849,742;
53. U.S. Patent 4,349,674;
54. Makino et al., Heterocycles, Vol. 26, pgs. 1215-1220 (1987);
55. Abstract of Iijima et al., Yakugaku Zasshi, Vol. 108, No. 5, pgs. 437-442 (1988);
56. Abstract of Cascieri et al., J. Biol. Chem., Vol. 274, No. 13, pgs. 8694-8697 (1999);
57. Abstract of O.S. Moustafa, Phosphorus, Sulfur Silicon Relat. Elem., Vol. 131, pgs. 49-57 (1997);
58. Abstract of Guillon et al., Pharm. Pharmacol. Commun., Vol. 4, No. 7, pgs. 319-324 (1998);
59. Abstract of Tomoda et al., Bull. Chem. Soc. Jpn., Vol. 71, No. 5, pgs. 1125-1135 (1998);
60. Abstract of Piras et al., Farmaco, Vol. 48, pgs. 1249-1259 (1993);
61. Abstract of Collins et al., Bioorg. Med. Chem. Lett., Vol. 2, No. 9, pgs. 915-918 (1992);
62. Abstract of Shinde et al., Indian Drugs, Vol. 27, pgs. 32-34 (1989);
63. Abstract of Iijima et al., Chem. Pharm. Bull., Vol. 37, No. 3, pgs. 618-620 (1989); and
64. Abstract of Mahajanshetti et al., Indian J. Chem., Vol. 12, No. 1, pgs. 54-56 (1974).

It is respectfully requested that these references be considered by the Patent and Trademark Office in its examination of the above-identified application and be made of record therein. The Examiner is also invited to contact the Undersigned if there are any questions concerning this paper or the attached references.

The information disclosure statement submitted herewith is being filed before the mailing date of a first Office action on the merits. Therefore, no fee is due.

Respectfully submitted,

Date: July 20, 2000



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Sheet 1 of 4

<b>FORM PTO-1449</b> (Rev. 2-32)	<b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>		Atty. Docket No. <b>5686.200-US</b>	Serial No. <b>09/483,504</b>
			Applicant: <b>Teng et al.</b>	
			Filing Date <b>January 14, 2000</b>	Group <b>To be assigned</b>

**INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT**

(Use several sheets if necessary)

**U.S. PATENT DOCUMENTS**

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
	4,200,748	04/29/80	Wright, Jr. et al.	544	99	01/22/79
	5,849,742	12/15/98	App et al.	514	249	05/09/97
	4,349,674	09/14/82	Freed, deceased et al.	544	353	12/18/78

**FOREIGN PATENT DOCUMENTS**

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 97/32858	09/12/97	WIPO				
	FR 1 469 360	01/02/67	France			X	
	EP 0 277 794 A2	08/10/88	EPO				
	WO 98/52945	11/26/98	WIPO			X	
	WO 99/01442	01/14/99	WIPO				

**OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)**

	J.J. Holst, Annu. Rev. Physiol., Vol. 59, pgs. 257-271 (1997)
	Nauck et al., J. Clin. Invest., Vol. 91, pgs. 301-307 (1993)
	Qualmann et al., Acta Diabetol., Vol. 32, pgs. 13-16 (1995)
	Nathan, M.D. et al., Diabetes Care, Vol. 15, pgs. 270-276 (1992)
	Nauck et al., Diabetologia, Vol. 36, pgs. 741-744 (1993)
	Kreymann et al., The Lancet, pgs. 1300-1304, December 5, 1987
	Rachman et al., Diabetologia, Vol. 40, pgs. 205-211 (1997)
	Gutniak, M.D., Ph.D. et al., Diabetes Care, Vol. 17, pgs. 1039-1044 (1994)
	Nauck et al., Diabetologia, Vol. 39, pgs. 1546-1553 (1996)
	Creutzfeldt, M.D., F.R.C.P. et al., Diabetes Care, Vol. 19, pgs. 580-586 (1996)
	Fehmann et al., Endocrinology, Vol. 130, pgs. 159-166 (1992)
	Wang et al., Endocrinology, Vol. 136, pgs. 4910-4917 (1995)

EXAMINER

DATE CONSIDERED

EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Sheet 2 of 4

FORM PTO-1449  
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Atty. Docket No. 5686.200-US

Serial No. 09/483,504

INFORMATION DISCLOSURE  
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Applicant Teng et al.

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Filing Date January 14, 2000

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## U.S. PATENT DOCUMENTS

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## FOREIGN PATENT DOCUMENTS

	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION	
						YES	NO
	WO 96/30370	10/03/96	WIPO				
	WO 95/05378	02/23/95	WIPO				
	DE 3 826 603 A1	02/08/90	Germany			X	
	EP 0 018 493 A1	11/12/80	EPO			X	
	EP 0 216 299 A1	04/01/87	EPO			X	

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Wang et al., The Journal of Clinical Investigation, Vol. 99, pgs. 2883-2889 (1997)
	Edvell et al., Endocrinology, Vol. 140, pgs. 778-783 (1999)
	Buteau et al., Diabetologia, Vol. 42, pgs. 856-864 (1999)
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	Holst et al., Diabetologia, Vol. 40, pgs. 984-986 (1997)
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	Flint et al., J. Clin. Invest., Vol. 101, pgs. 515-520 (1998)
	Naslund et al., Drug News Perspect, Vol. 11, pgs. 92-97 (1998)
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	Naslund et al., Digestive Diseases and Sciences, Vol. 43, pgs. 945-952 (1998)

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<b>FORM PTO-1449</b> (Rev. 2-32)  <b>U.S. DEPARTMENT OF COMMERCE</b> <b>PATENT AND TRADEMARK OFFICE</b>  <b>INFORMATION DISCLOSURE</b> <b>STATEMENT BY APPLICANT</b>  (Use several sheets if necessary)	<b>Atty. Docket No. 5686.200-US</b>	<b>Serial No. 09/483,504</b>
	<b>Applicant Teng et al.</b>	
	<b>Filing Date January 14, 2000</b>	<b>Group To be assigned</b>

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						YES	NO
	EP 0 338 346 A2	10/25/89	EPO			X	
	WO 95/24403	09/14/95	WIPO				
	WO 99/01423	01/14/99	WIPO				
	WO 91/11457	08/08/91	WIPO				
	WO 90/11296	10/04/90	WIPO				

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	Knudsen et al., European Journal of Pharmacology, Vol. 318, pgs. 429-435 (1996)
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	Mechanism et al., The Journal of Biological Chemistry, Vol. 273, No. 29, pgs. 17979-17982 (1998)
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	Abstract of O.S. Moustafa, Phosphorus, Sulfur Silicon Relat. Elem., Vol. 131, pgs. 49-57 (1997)
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Sheet 4 of 4

FORM PTO-1449  
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Atty. Docket No. 5686.200-US

Serial No. 09/483,504

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Applicant Teng et al.

(Use several sheets if necessary)

Filing Date January 14, 2000

Group To be assigned

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						YES	NO
	WO 87/06941	11/19/87	WIPO				
	WO 98/28414	07/02/98	WIPO				
	WO 98/20895	05/22/98	WIPO				
	966,818	08/19/64	Great Britain				

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

	Abstract of Tomoda et al., Bull. Chem. Soc. Jpn., Vol. 71, No. 5, pgs. 1125-1135 (1998)
	Abstract of Piras et al., Farmaco, Vol. 48, pgs. 1249-1259 (1993)
	Abstract of Collins et al., Bioorg. Med. Chem. Lett., Vol. 2, No. 9, pgs. 915-918 (1992)
	Abstract of Shinde et al., Indian Drugs, Vol. 27, pgs. 32-34 (1989)
	Abstract of Iijima et al., Chem. Pharm. Bull., Vol. 37, No. 3, pgs. 618-620 (1989)
	Abstract of Mahajanshetti et al., Indian J. Chem., Vol. 12, No. 1, pgs. 54-56 (1974)

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Attorney Docket No.: 5686.200-US

PATENT

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Application of: Teng et al.

Application No.: 09/483,504

Group Art Unit: 1614

Filed: January 14, 2000

Examiner: To be assigned

For: Non-Peptide GLP-1 Agonists

**SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT**Assistant Commissioner for Patents  
Washington, DC 20231

Sir:

In accordance with 37 C.F.R. 1.56, 1.97 and 1.98, Applicants submit herewith a reference which they believe may be material to the patentability of this application and with respect to which there may be a duty to disclose in accordance with 37 C.F.R. 1.56.

While the reference may be "material" under 37 C.F.R. 1.56, it is not intended to constitute an admission that this reference is "prior art" unless specifically designated as such.

The filing of this Supplemental Information Disclosure Statement shall not be construed as a representation that no other material references than this listed exists or that a search has been conducted.

The reference is listed in Form PTO-1449 which is in accordance with the requirements of M.P.E.P. 609. A copy of the reference is also enclosed. The reference is as follows:


1. Chung et al, Chem. Commun. "Quinoxalino-fused sultines and their application in Diels-Alder reactions" pgs. 205-206 (1997)

It is respectfully requested that this reference be considered by the Patent and Trademark Office in its examination of the above-identified application and be made of record therein. The Examiner is also invited to contact the Undersigned if there are any questions concerning this paper or the attached reference.

The supplemental information disclosure statement submitted herewith is being filed before the mailing date of a first Office action on the merits. Therefore, no fee is due.

Respectfully submitted,

Date: 18 July 2001

  
\_\_\_\_\_  
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Sheet 1 of 1

FORM PTO-1449  
(Rev. 2-32)U.S. DEPARTMENT OF COMMERCE  
PATENT AND TRADEMARK OFFICE

Att'y. Docket No. 5686.200-US

Serial No. 09/483,504

INFORMATION DISCLOSURE  
STATEMENT BY APPLICANT

Applicant Teng et al.

(Use several sheets if necessary)

Filing Date January 14, 2000

Group 1614

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						YES	NO

## OTHER DOCUMENTS (Including Author, Title, Date, Pertinent Pages, Etc.)

			Chung et al, Chem. Commun. "Quinoxalino-fused sultines and their
			Application in Diels-Alder reactions" pages 205-206 (1997)

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